REMARKS

Applicant appreciates the Examiner's thorough consideration provided the present application. Claims 1-21 are now present in the application. Claims 1, 3, 4, 6, 8 and 10-12 have been amended in this Reply. Claims 19 and 21 have been added. Claims 1 and 8 are independent. Reconsideration of this application is respectfully requested.

Claim Rejections Under 35 U.S.C. §112

Claims 1 and 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

In view of the foregoing amendments, it is respectfully submitted that this rejection has been addressed. Accordingly, all pending claims are now definite and clear. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, are therefore respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-4, 6-12 and 14-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tuchitoi, U.S. Patent No. 7,145,683, in view of Ferlitsch, U.S. Patent No. 7,190,477, Barrett, U.S. Patent No. 5,935,262, and Imbrie, U.S. Patent Application Publication No. 2002/0169002. Claims 5 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tuchitoi in view of Ferlitsch, Barrett and Imbrie, and further in view of Gassho, U.S. Patent No, 7,180,626. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

In light of the foregoing amendments, Applicant respectfully submits that this rejection has been obviated and/or rendered moot. Without conceding to the propriety of the Examiner's rejection, but merely to timely advance the prosecution of the application, as the Examiner will note, independent claims 1 and 8 have been amended.

Independent claim 1 recites a combination of elements including "means for validating the stored print jobs for printing, wherein said validating means receives the print account jobs and without user interaction validates a corresponding print job for printing in the case a valid print account job generated as the second print job has been received."

Independent claim 8 recites a combination of elements including "means for validating the stored print job for printing, said validating means being configured to receive the corresponding print account job and without user interaction validate the print job for printing in case the corresponding print account job generated as the second print job is valid."

Support for the amendments to claims 1 and 8 can be found in FIG. 4 and paragraph [0024] of the specification as originally filed. Applicant respectfully submit that the combinations of elements set forth in claims 1 and 8 are not disclosed or suggested by the references relied on by the Examiner.

The Examiner has correctly acknowledged that Tuchitoi, Ferlitsch and Barrett fail to teach the validating means as recited in claims 1 and 8. Therefore, Tuchitoi, Ferlitsch and Barrett also fail to teach "means for validating the stored print jobs for printing, wherein said validating means receives the print account jobs and *without user interaction* validates a

corresponding print job for printing in the case a valid print account job generated as the second print job has been received" as recited in amended claim 1 and "means for validating the stored print job for printing, said validating means being configured to receive the corresponding print account job and *without user interaction* validate the print job for printing in case the corresponding print account job generated as the second print job is valid" as recited in amended claim 8.

Imbrie also fails to cure the deficiencies of Tuchitoi, Ferlitsch and Barrett. In particular, the Examiner alleged that Imbrie in paragraph [0052] discloses the validating means of the present invention. However, Imbrie in paragraph [0052] and [0058] discloses:

> [0052] Referring to FIG. 6, after the desired printing assembly 40 has been selected, an ID query dialog is displayed on the screen display 28 by the print driver in step 350. The ID query dialog **prompts the user to input an identifier (ID)** which is specific to the user (e.g., the last four digits of a credit card number). **Requiring the user to imput an ID** at step 360 is the first of two steps by which the print job is linked to the user at the printing assembly 40, which will be more fully discussed below. These steps will collectively be referred to as "authentication" herein.
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> [0058] Validation is step two of the authentication process. During validation, **the user in step 450 interacts with the validation device 80** thereby linking the user's physical presence at the printing assembly 40 with the print job information, and therefore the user ID. This ensures that the print data will not be printed before the user is prepared to claim the printed document, and ensures that the proper print job is released to the proper user. (Emphasis added).

In other words, Imbrie in paragraphs [0052] and [0058] discloses that an authentication process requires the input of the user ID, and during validation (which is part of the authentication process) the user interacts with the validation device 80 to link the user's physical presence at the printing assembly 40 with the print job information, and therefore the user ID. Therefore, the validation in Imbrie requires user interaction.

This is in contrast with the present invention. According to the present invention, the user requests for printing a document using a print driver application at his workstation. By the print driver he enters print specifications and account info at his workstation. A print job and a print account job are created by the driver application and the print job and the print account job are sent to the printer. At the printer a validation takes place *without any user interaction*. There is no need of a physical presence of the user at the printer. No extra dialog screen at the printer is necessary.

Therefore, Imbrie still fails to teach "means for validating the stored print jobs for printing, wherein said validating means receives the print account jobs and *without user interaction* validates a corresponding print job for printing in the case a valid print account job generated as the second print job has been received" as recited in amended claim 1 and "means for validating the stored print job for printing, said validating means being configured to receive the corresponding print account job and *without user interaction* validate the print job for printing in case the corresponding print account job generated as the second print job is valid" as recited in amended claim 8.

In addition, the Examiner referred to Ferlitsch's additional file as the print amount job. However, Applicant had already presented arguments in the Amendment dated February 12, 2010 traversing the Examiner's position. The Examiner in the outstanding Office Action only admitted that Ferlitsch fails to teach the validating means and that the additional file is the second print file as recited in claims 1 and 8, but failed to fully respond to the other arguments in the Amendment dated February 12, 2010.

For the Examiner's convenience, Applicant re-presents these arguments in the Amendment dated February 12, 2010, arguing that Ferlitsch's additional file cannot be construed as the print amount job, as follows:

> Ferlitsch discloses a computer based printing system (see Fig. 5), which comprises a printing source 80, a printing apparatus 108 and a print server 116 including a job ticket spooler 164 and a job ticket queue 168. The printing source 80 keeps a queue of spooled print jobs for the accessible printing apparatus 108 in a spool directory until despooled to a port manager 96 associated with the printing apparatus 108. An additional file may be kept in the spool directory or in another location on disk or in memory that maintains an ordered list of spooled print jobs for the printing apparatus 108. Each entry includes information for identifying the spool data, the header and the queue information for a print job.
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> The Examiner referred to this additional file as the print account job of the present invention, which contains account information of a corresponding print job and is linked to the corresponding print job by a linking identifier. Applicant respectfully disagrees.
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> First of all, Ferlitsch's additional file contains account info of several jobs (see col. 10, lines 25-28), and each entry of the additional file is linked to a regular print job. However, since the additional file registers every spooled print job to be sent to the printing apparatus, the additional file contains usually information of more than one job. Unlike Ferlitsch, in the present invention, since every job has a corresponding print account job, and each print account job contains only information of the corresponding print job. There is a one-to-one relation between a print job and its corresponding print account job. Therefore, Ferlitsch's additional file is not the print account job as recited in claims 1 and 8.
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> Second, Ferlitsch nowhere discloses that the additional file is submitted to the printing apparatus 108 as a print job. Unlike Ferlitsch, in the present invention, since each time a print job is submitted, a print account job corresponding to the print job is also submitted. An example of a submission command of a print job and a print account job is given in paragraph [0017]-[0020] of the present application. As embodied in the present application, the print job and the print account job can be linked by the job name and a unique code as follows:
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> Lpr "Tulip Bridge overall view - C715"
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> Lpr "**[account info]** Tulip Bridge overall view - C715"
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> In this example, each of the print job and the print account job are submitted via an Lpr command. The printing device is aware of the special prefix [account info] to recognize the print account job as a job providing account information for a corresponding print job having the same job name. Since each of the print job and the print account job is submitted as a print job, the system of

> the present invention has the advantage that both jobs can be treated in the same way until they reach the control unit of the printing device, and the control unit can distinguish the print jobs from the print account jobs based on the information such as the special prefix [account info]. These features are clearly absent from Ferlitsch and Tuchitoi.
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> Third, it was never the intention to consider the print account job as an additional file, containing account information, since the present invention also discloses an account log file 9, in which the account information of the print account job is stored (see paragraph [0024] and FIG. 4, step 20).
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> Fifth, combining Tuchitoi and Ferlitsch would lead to printing a print job and sending along with each print job the complete additional file as a second print application. This will be very cumbersome and *degrade* the system performance, since the additional file usually contains information of more than one spooled file, especially if the printing apparatus is frequently or constantly printing jobs. Therefore, the additional file containing more than one entry has to be sent several times to the printing apparatus. Since the additional file containing more than one entry, the redundant/irrelevant information not related to the current print job will still be sent every time, resulting in extra network traffic. This is also in contradiction with Ferlitsch, which is proposed to reduce network traffic. Therefore, one skilled in the art would not be motivated to modify Tuchitoi in view of Ferlitsch's additional file.

Further, the Examiner referred to Barrett's log file as the print amount job and the second print job. However, Applicant had already presented arguments in the Amendment dated October 22, 2009 traversing the Examiner's position. The Examiner in the follow-up Office Action dated November 13, 2009 never responded to these arguments. Instead, the Examiner withdrew his rejection based on Barrett in the Office Action dated November 13, 2009. The Examiner, however, in the outstanding Office Action again took the same position as in the Office Action dated August 21, 2009, without responding to the arguments in the Amendment dated October 22, 2009. For the Examiner's convenience, Applicant re-presents the arguments in the Amendment dated October 22, 2009, arguing that Barrett's log file cannot be construed the print amount job and the second print job, as follows:

In particular, Barrett discloses a network device that interfaces between a local area network (LAN) and an image forming apparatus, and can output a log file generated by an autologging function. The log file of Barrett contains job information of all jobs sent to the image forming apparatus, such as the user of each print job (13003), the date (13001) and time (13002) on/at which all print jobs are printed, etc. (see FIG. 13). The Examiner alleged that Barrett's log file is the account print job which contains account information of a corresponding print job and is linked to the corresponding print job by a link identifier as recited in claim 1. Applicant respectfully disagrees.

First, the log file of Barrett contains account information of a plurality of print jobs (see SOJ information in Table 1 in col. 14 of Barrett), and each entry of the log file is linked to a regular print job. However, since the log file registers every print job sent to the printing apparatus, the log file contains information of a plurality of print jobs. In other words, there is a many-to-one relation between the print jobs and the log file. Unlike Barrett, in the present invention, each job has a corresponding account print job, and each account print job contains only information of the corresponding print job. In other words, there is a one-to-one relation between a print job and its corresponding account print job in the present invention. Therefore, Barrett's log file is not the account print job as recited in claims 1 and 8.

Second, Barrett in FIG. 11 discloses that the log file is submitted to the image forming apparatus only if a triggering condition is detected. This is in contrast with the present invention. In particular, in the present invention, each time when a print job is submitted, an account print job corresponding to the print job is also submitted. An example of a submission command of a print job and a print account job is given in paragraph [0017]-[0020] of the present application. As embodied in the present application, the print job and the print account job can be linked by the job name and a unique code as follows:

Lpr "Tulip Bridge overall view - C715"

Lpr "**[account info]** Tulip Bridge overall view - C715"

In this example, each of the print job and the print account job are submitted via an Lpr command. The printing device is aware of the special prefix [account info] to recognize the print account job as a job providing account information for a corresponding print job having the same job name. Since each of the print job and the print account job is submitted as a print job, the system of the present invention has the advantage that both jobs can be treated in the same way until they reach the control unit of the printing device, and the control unit can distinguish the print jobs from the print account jobs based on the information such as the special prefix [account info]. These features are clearly absent from Barrett and Tuchitoi.

Third, when a log file is submitted to the image forming apparatus of Barrett, it is printed on the image forming apparatus. Unlike Barrett, in the present invention, the print account job is not printed. Instead, after printing of the corresponding print job, the print account job is removed from the holding

> queue of the printing device (see paragraph [0024], last three lines, and step 21 of FIG. 4) without being printed.
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> Applicant also respectfully submits that combining Tuchitoi and Barrett would simply lead to print a print job, sending along with each print job the complete log file as a second print application. This will *degrade* the system performance since a log file will expand to a large file within a short period of time when the image forming apparatus prints jobs frequently, because the log file has to include the information for all printed jobs. Therefore, one skilled in the art would not be motivated to modify Tuchitoi in view of Barrett's log file.

With regard to the Examiner's reliance on Gassho, this reference has only been relied on for its teachings against some dependent claims. This reference also fails to disclose the above combinations of elements as set forth in independent claims 1 and 8. Accordingly, this reference fails to cure the deficiencies of Tuchitoi, Ferlitsch and Barrett.

Accordingly, none of the utilized references individually or in combination teach or suggest the limitations of independent claims 1 and 8. Therefore, Applicant respectfully submits that independent claims 1 and 8 clearly define over the teachings of the utilized references.

In addition, claims 2-7 and 9-19 depend, either directly or indirectly, from independent claims 1 and 8, and are therefore allowable based on their respective dependence from independent claims 1 and 8, which are believed to be allowable.

In view of the above remarks, Applicant respectfully submits that claims 1-19 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are respectfully requested.

Additional Claims

Claims 20 and 21 have been added for the Examiner's consideration.Applicant respectfully submits that claims 20 and 21 are allowable due to their respective dependence on independent claims 1 and 8, as well as due to the additional recitations included in these claims.

In particular, each of the additional file of Ferlitsch and the log file of Barrett is a separate print application intended to be printed. However, the print account job as the second print job of the present invention is not intended to be printed and especially not intended to be printed at the same time as the corresponding print job, since it comprises no data of a document or image. Instead, the second print job is used for the purpose of validating the corresponding print job for printing. Therefore, the additional file of Ferlitsch and the log file of Barrett fail to teach "the second print job is not intended to be printed" as recited in claims 20 and 21.

In addition, neither Ferlitsch nor Barrett teaches that the additional file of Ferlitsch or the log file of Barrett will be substantially simultaneously submitted with a submission of the print job. Also, Imbrie discloses that the intermediate device 50 in step 460 has to transmit a tag to the submitting device 20 prompting to release the print data from the spooler. The release of the print data takes place after the print data validating step 450 at the intermediate device 50. When the user is not in the direct neighbourhood of the printer and due to the input of the user ID at the intermediate device 50, there is a considerable time span between the submission of the print job info and the submission of the print data to the intermediate device 50.

Unlike Ferlitsch, Barrett and Imbrie, in the present invention, the print job comprising print data and the print account job are submitted substantially simultaneously to the printer (see for example step 13 of FIG. 3) and will arrive at the printer almost at the same time. Therefore,

Imbrie fails to teach "the means for generating and submitting the print account job substantially simultaneously submits the print account job with a submission of the print job" as recited in claim 20 and "the corresponding print account job generated as the second print job is substantially simultaneously submitted with a submission of the print job" as recited in claim 21.

Favorable consideration and allowance of claims 20 and 21 are respectfully requested.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Cheng-Kang (Greg) Hsu, Registration No. 61,007 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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